

Title (en)

PIEZOELECTRIC FORCE MEASUREMENT DEVICE

Title (de)

PIEZOELEKTRISCHE KRAFTMESSVORRICHTUNG

Title (fr)

DISPOSITIF DYNAMOMÉTRIQUE PIÉZOÉLECTRIQUE

Publication

EP 3019842 B1 20180912 (DE)

Application

EP 14728453 A 20140604

Priority

- DE 102013107210 A 20130709
- EP 2014001509 W 20140604

Abstract (en)

[origin: WO2015003764A1] The invention relates to a force measurement device comprising - a deformation body (10) supported on a base, which is in a zero position (12) when unaffected by external forces (13) and which can be deflected by an external force (13), and - a sensor (30) which comprises a piezo element and by means of which a signal dependent on the deformation of the deformation body (10) can be generated and transmitted to a control apparatus, wherein a measured value representative of the external force (13) can be determined by the control apparatus. The invention is characterized in that an actuator (31) which comprises a piezo element can be actuated by the control apparatus dependent on the sensor signal so that a restoring force can be exerted against the external force (13) on the deformation body (10), which can be thus transitioned back to the zero position (12) thereof.

IPC 8 full level

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CPC (source: EP)

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Citation (examination)

- EP 2073343 A1 20090624 - SICK AG [DE]
- EP 2199769 A2 20100623 - BUNDESREP DEUTSCHLAND [DE]
- DE 102010030652 A1 20111229 - BOSCH GMBH ROBERT [DE]
- JP H09325080 A 19971216 - ISHIDA SEISAKUSHO
- JP 2013044711 A 20130304 - UNIV SAITAMA

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DOCDB simple family (publication)

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